

DETAILED ACTION

1. In view of the Appeal Brief filed on March 27, 2008, PROSECUTION IS HEREBY REOPENED. An Office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Milton I. Cano/

Supervisory Patent Examiner, Art Unit 1794

The rejection of claims 2-4, 6, 9, and 11-12 as being unpatentable over PCT Patent Publication WO 01/14630 A1 is withdrawn upon further consideration.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 5, 7-8, 10, and 13-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Baranda et al., US 2003/009252 A1 (Baranda).

Claims 13 and 14 are product-by-process claims. “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” MPEP 2113

Baranda discloses an elevator belt assembly comprising a plurality of cord within a jacket and a method of making, said method comprising aligning the cords in a desired alignment, tensioning the cords and applying a jacket to the cords during the tensioning process, as required by claims 1, 7, and 13. See [0034]. The jacket is a urethane, per claims 5, 10 and 14, and the belt has limited stretch as required by claim 8. See [0009], [0020], [0029] and [0034].

Therefore the teachings of Baranda anticipate the invention as claimed in present claims 1, 5, 7-8, 10 and 13-14.

4. Claims 7-10 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by PCT Patent Publication WO 01/14630 A1 (hereinafter Prewo).

Claims 13 and 14 are product-by-process claims. “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or

obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” MPEP 2113

Prewo teaches a tension member for an elevator comprising organic fibers and steel fibers encased in a polyurethane jacket. See page 3, lines 7-14 and page 5, line 3.

Accordingly, the teachings of Prewo anticipate the invention as claimed in present claims 7-10 and 13-14.

5. Claims 1-4, 6-9, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lambert 1,412,310.

Lambert discloses a belt and method for forming said belt comprising longitudinally extending cords in a selected arrangement under tension and stretching said cords, and applying a selected jacket material to the cords to encase the cords in the jacket while the cords remain stretched within the jacket as required by present claims 1, 7 and 13. It should be noted that the preamble language of “elevator belt assembly” is drawn to the future intended use of the belt and is not construed to be limiting. See entire document, and in particular, lines 15-21. The cords are stretched to their approximate limit of elongation, which necessarily results in a belt assembly having limited elastic stretch, as required by claim 8 and the cords being tensioned using a load corresponding to a desired percentage of a breaking strength of the cords, per claim 3 and the load corresponding to at least approximately 10% of the cord breaking strength, as required by claims 4 and 12. Applicants should note that the limitation of claim 3 is not specific and it is the examiner’s position that in the absence of a clear

defined percentage, any load necessarily corresponds to "a desired percentage of a breaking strength of the cords." Also, claim 12 is a product claim, wherein limitations drawn to the process of making add no patentable weight. Claim 2 contains limitations drawn to assumptions based upon the future intended use of the belt and is not specific. In this regard, Lambert discloses that the layer of cord is laid while under stress or tension of desired degree and preferably the tension of the members is such as to substantially prevent further elongation of the belt after it has been finished. This teaching anticipates the method of claim 2 and claim 11. However, claim 11 is a product claim, wherein limitations drawn to the process of making add no patentable weight. See lines 63-69. Regarding claims 6 and 9, Lambert teaches that the cords can be rubberized, or more specifically, "making the cords using a synthetic material" or "the cords comprise a synthetic material." Regarding claim 13, this claim is a product-by-process claim. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." MPEP 2113.

Therefore, the teachings of Lambert anticipate the invention as claimed in present claims 1-4, 6-9, and 11-13.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-3, 5-6, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Patent Publication WO 01/14630 A1 (hereinafter Prewo) in view of Roberts, 3,441,641.

Prewo is as set forth above and teaches a tension member for an elevator comprising organic fibers and steel fibers because the combined organic and steel fibers result in a shared load that provides significantly enhanced properties. See page 3, lines 20-26. In addition, Prewo teaches that the tension member includes individually load carrying cords, strands and/or wires encased in a common layer of coating but does not teach the specific method steps associated therewith. Roberts teaches an elevator assembly belt formed by the method comprising positioning and tensioning a plurality of longitudinally extending members in a mold, closing the mold and applying a selected material over the tensioned members, whereby said process ensures the tension members remain straight and parallel with respect to each other and results in an elevator belt assembly with a high degree of flexibility and reduced strain. It would have been obvious to one having ordinary skill in the art to form the tension member taught by Prewo by using a method that includes aligning the cords, tensioning the cords and applying a jacket material to the cords, as taught by Roberts to product a material having a high degree of flexibility and reduced strain and wherein the tension members remain straight and parallel. Claim 2 contains limitations drawn to assumptions based upon the future intended use of the belt and are not specific and

claim 11 is a product claim, wherein limitations drawn to the process of making add no patentable weight. Nonetheless, Prewo and Roberts are both drawn to the formation of tension members and belts to be used in an elevator assembly system. The skilled artisan during routine experimentation would have been reasonably motivated to tension the cords using a load that corresponds to that which would result in the safe operation of the car and counterweight. As to claim 3, applicants should note that the limitation of claim 3 is not specific. Accordingly, it is the examiner's position that in the absence of a clear defined percentage any load necessarily corresponds to "a desired percentage of a breaking strength of the cords." Regarding claim 5, Prewo teaches that the jacket material can be urethane. As to claim 6, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make an elevator belt assembly by including cords made of a synthetic material in order to obtain the efficacious properties associated therewith.

Therefore, the teachings of Prewo would have rendered obvious the invention as claimed in present claims 1-3, 5-6, and 11.

Response to Arguments

8. Applicant's arguments filed March 27, 2008 have been fully considered but they are not persuasive.

Applicants argue that the examiner has taken the position that any tension placed on a cord will "stretch" the cord and that such an interpretation of applicant's claim language is not reasonable and should be reversed, Further arguing that the term stretch as used in applicant's claims must be interpreted to mean something different

than merely applying tension to the cords and if “stretch” and tension mean the exact same thing within the context of applicant’s claims, then the recitation of tension and stretch as separate items would be redundant and meaningless and that stretching and tensioning are two different things within the context of applicant's claims.

The examiner disagrees. In particular, claim terms are presumed to be given their ordinary and customary meaning. It should be noted that there is no indication in the written description that applicants' acted as their own lexicographer and the written description does not expressly define “stretch” or disclaim a particular meaning thereof. Additionally, the context of the surrounding words in a claim also must be considered in determining the ordinary and customary meaning of a disputed claim limitation. According to the Merriam-Webster Dictionary, the term “tension” is defined as “the act or action of stretching or the condition or degree of being stretched to stiffness.” This definition appears to be consistent with the context of the surrounding words in the present claims, “[t]ensioning the cords a selected amount to stretch the cords”.

Applicants argue that there is nothing in the Baranda reference that in any way indicates that any cords are stretched during a process of making an elevator belt assembly and that Baranda teaches applying tension to the cords in a manner that controls the spacing of the cords from the exterior surface of the jacket that encases the cords in that reference, further arguing that keeping a cord straight is not the same thing as stretching a cord as applicant is claiming stretching cords and that there is nothing in the Baranda reference that in any way indicates that any tension applied in that reference would cause the cords to be stretched because the tension applied in

Baranda does not rise anywhere near the level of a tension to pre-stretch a cord as claimed by applicant and that tensioning the cords for maintaining them in a straight or desired alignment during a belt manufacturing process is not the same as and does not in any way suggest stretching the cords during a belt making process.

As set forth above, "tension" is defined as the act of stretching or the condition of being stretched. Thus, it is the examiner's position that the tensioned cords of the prior art are stretched. Even if the degree of stretching is very small, this does not preclude the clear definition of tension, nor does this definition distinguish between "keeping a cord straight" and deformation. Furthermore, the language of "tensioning the cords a selected amount to stretch the cords" is not specific and implies that tensioning per se results in stretching.

Applicants argue that there is nothing within Baranda that suggests pre-stretching cords and then applying a jacket material such that the cords remain in that stretched condition within the jacket and that (claim 1) and that there is nothing within Baranda that in any way suggest that cords are maintained in a stretched condition absent an external load applied to the cords (claim 7).

The examiner disagrees. In particular, it is noted that Baranda teaches that a select tension is maintained on each of the cords while applying the jacket. See [0009].

Applicants argue that claim 8 specifically recites that the belt assembly "has limited elastic stretch" and that the belt assembly of Baranda would have elastic stretch that would occur once such a belt assembly were installed in an elevator system and

that there is nothing in any of the cited references that discloses a belt assembly that has limited elastic stretch.

In this regard, it is the examiner's position that the language of "limited elastic stretch" is not specific. In particular, this language does not provide any specific degree of stretching or change in length or amount of elongation, etc. and this determination would be based upon the materials that are used to form the cords.

Applicants argue that the Prewo reference is silent regarding any stretching of the cords within the jacket of that reference and that the only possible mentioning of anything in the Prewo reference that relates in any way to stretching of the cords is related to breaking the cords during use in an elevator system, further arguing that there is no teaching or suggestion that the jacket of the Prewo reference keeps the cords stretched without any external load applied to the belt assembly and that the only stretching mentioned in the Prewo reference occurs as a result of an external load being applied to the belt of the Prewo reference.

In this regard, it is the examiner's position that Prewo teaches a load bearing tension member comprising a plurality of cords and a jacket over the cords. As set forth above, the requirement that the cords be stretched is not specific.

Applicants argue that with respect to claim 8, the only possible reasonable interpretation of the Prewo reference is that it would experience significant elastic stretch and therefore cannot be interpreted as teaching a belt assembly that has limited elastic stretch because it does not teach a belt assembly having cords pre-stretched

and maintained in a stretched condition without any external load applied to the belt assembly as required by present claim 8.

In this regard, it is the examiner's position that the language of "limited elastic stretch" is not specific. In particular, this language does not provide any specific degree of stretching or change in length or amount of elongation, etc. and this determination would be based upon the materials that are used to form the cords. Moreover, it is noted that Prewo uses steel cords, with low stretch in his belt assembly. This teaching would necessarily result in an assembly having limited elastic stretch.

Applicants argue that with respect to claims 2-4, 6, 9, and 11-13, Prewo does not provide any indication of any tension on the cords to stretch the cords combined with applying a jacket material to the cords so that they remain stretched within the jacket.

In this regard, the previous rejection of claims 2-4, 6, 9, and 11-13 is moot. Nonetheless, the combined teachings of Prewo and Roberts would have provided motivation to the skilled artisan to tension the cords and apply a jacket material to the cords while the cords remain tensioned.

Applicants argue that with respect to claims 2 and 11, that these claims recite that the cords are tensioned using a load that exceeds an anticipated greatest load that the belt assembly will experience once installed in an elevator system and that there is nothing whatsoever within the Prewo reference or any of the other cited references that in any way corresponds to making an elevator belt assembly and tensioning cords to stretch them using a load of the type recited in claims 2 and 11.

In this regard, as set forth previously, these limitations are drawn to assumptions based upon the future intended use of the belt and are not specific and claim 11 is a product claim, wherein limitations drawn to the process of making add no patentable weight. Nonetheless, Prewo and Roberts are both drawn to the formation of tension members and belts to be used in an elevator assembly system. The skilled artisan during routine experimentation would have been reasonably motivated to tension the cords using a load that corresponds to that which would result in the safe operation of the car and counterweight.

Applicants argue with respect to claim 3, there is nothing whatsoever in the Prewo reference that comes anywhere near suggesting using a load that is a desired percentage of a breaking strength of the cords when tensioning them sufficiently to stretch the cords.

As set forth previously and incorporated herein, the limitation of claim 3 is not specific. Accordingly, it is the examiner's position that in the absence of a clear defined percentage any load necessarily corresponds to "a desired percentage of a breaking strength of the cords."

Applicants' arguments with respect to claims 4 and 12-14 are moot in view of the new and/or modified grounds of rejection.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jill Gray
Primary Examiner
Art Unit 1794

/Jill Gray/
Primary Examiner, Art Unit 1794